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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,137	12/10/2003	Yi-Cheng Yuan	YUAN3008/EM	4784
23364	7590	07/14/2005	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			FERGUSON, MICHAEL P	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/731,137

Applicant(s)

YUAN ET AL.

Examiner

Michael P. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 11 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Cullen (US 5,775,862).

As to claim 1, Cullen discloses a fastening structure for a connector **72** having a threaded section, comprising:

a substrate **18**;

an inserting hole, formed through the substrate; and

a plurality of resilient sheets **20**, formed along an inner periphery of the inserting hole,

wherein each resilient sheet has a free section extending at a nonzero angle with respect to a plane of the substrate. And

wherein a distance between the free sections is slightly larger than a maximal diameter of the threaded section of the connector such that when the connector is inserted into the inserting hole and the free sections are pressed by a fixture to be parallel to a plane of the substrate, the free sections engage the threaded section to fasten the connector to the substrate without need for a fastening nut (Figures 2 and 5-9).

As to claim 2, Cullen discloses a fastening structure wherein the free section of each resilient sheet **20** is a curved free section (Figure 2).

As to claim 3, Cullen discloses a fastening structure wherein each resilient sheet **20** is integrally formed with the substrate **18** (Figure 2).

As to claim 4, Cullen discloses a fastening structure wherein the inserting hole has a rectangular cross-section taken in a radial direction (Figure 2).

As to claim 5, Cullen discloses a fastening structure wherein the resilient sheets **20** respectively have an arc shape and are mounted inside the inserting hole so that arc edges of the resilient sheets and an inner periphery of the inserting hole define an arc opening (Figure 2).

As to claim 6, Cullen discloses a fastening structure wherein the inserting hole has a polygonal cross-section taken in a radial direction (Figure 2).

As to claim 7, Cullen discloses a fastening structure wherein one edge of each resilient sheet **20** and the inner periphery of the inserting hole define an arc opening, while remaining portions of each resilient sheet are located outside the inserting hole (Figure 2).

As to claim 11, Cullen discloses a fastening structure wherein the resilient sheets **20** curve (radially) toward the connector **72** (Figure 5).

As to claim 13, Cullen discloses a fastening structure wherein the inserting hole has an approximately round hole (Figure 2).

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-7, 11 and 13 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to fastening structures:

Tinnerman (US 2,401,672), Judd (US 2,377,694), Hughes (US 2,373,312) and Kost (US 2,279,169) are cited for pertaining to structures comprising a substrate, an inserting hole, and a plurality of resilient sheets.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. The newly added limitations of "wherein a distance between the free sections is slightly larger than a maximal diameter of the threaded section of the connector such that when the connector is inserted into the inserting hole and the free sections are pressed by a fixture to be parallel to a plane of the substrate, the free sections engage the threaded section to fasten the connector to the substrate without need for a fastening nut" in claim 1 necessitating the new grounds of rejection.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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